

REMARKS

Claims 1-11 and 41-43 are pending. Claims 12-40 are canceled. By this Amendment, claims 1-7 and 9-11 are amended for further clarity and to satisfy a requirement of form asserted in the Final Rejection. New claims 41-43 are added. Support for the new claims may be found in paragraph [0036] and Fig. 2, for example. No new matter is added.

Entry of the amendments is proper under 37 CFR § 1.116 because the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) satisfy a requirement of form asserted in the previous Office Action; and (c) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to objections raised in the final rejection. Entry of the amendments is thus respectfully requested.

The courtesies extended to Applicants' representatives Kip Werking and Daniel Tucker by Examiner Hung during the February 5, 2008 personal interview are appreciated. The substance of the personal interview is incorporated into the remarks below.

The Office Action objects to claims 1, 3, 5-7 and 9-11. These claims have been amended to obviate the Office Action's objections. Withdrawal of the objections to these claims is respectfully solicited.

The Office Action rejects claims 1, 8 and 9 under 35 U.S.C. § 103(a) over Tashiro (U.S. 5,748,773) in view of Sindhu (U.S. 6,175,650)¹. This rejection is respectfully traversed for the following reasons.

¹ At the beginning of paragraph 8, the Office Action states that the rejection is under 35 U.S.C. § 102(b). However, the context makes clear that the rejection is under 35 U.S.C. § 103(a).

I. There is no reason to combine Tashiro with Sindhu because the modification of

Tashiro renders it unsatisfactory for its intended purpose

Sindhu is directed to a method for adaptively encoding JPEG images according to the textures in different blocks of the image. See col. 7, lines 1-13. For example, a higher level of compression may be appropriate for a smooth picture, whereas a lower level of compression may be appropriate for text. See Figs. 14a, 14b and 14c.

The system in Tashiro is directed to determining whether an image is of a normal, gradation, or reversal type. Once the system determines the type of the image, the system further selects an appropriate luminance formula to convert the image's luminance values for the purpose of reproduction. For example, the formula used for normal images (e.g. pencil marks on a white paper) is designed to increase the density of light characters without recording a background portion. See col. 10, lines 20-27. Similarly, the formula used for reversal images (e.g. white characters on a solid-color background) is designed to darken the background portion and prevent slight background fogging of a white character portion. See col. 10, lines 28-37.

However, the system in Sindhu is oblivious to whether lighter or darker colors predominate in the image. Sindhu is only directed to determining the relative "business" or complexity of an image. See col. 7, lines 61-67. But any predominantly light image or any predominantly dark image may be more or less complex. The complexity of the image does not necessarily have anything to do with the relative amounts of light and dark pixels in the image.

As an illustrative example, consider that any given image has the exact same complexity as the negative of that image does. Thus, although a light image might have far more light pixels than dark pixels, and its negative would therefore have far more dark pixels than lights pixels, the system in Sindhu would be unable to distinguish between the two. For

example, a pure white page contains only light pixels and no dark pixels and a pure black page contains only dark pixels and no light pixels. But both are equally complex. Thus, the system in Sindhu is incapable of making precisely the distinction between normal and reversal type images that the system in Tashiro needs. Accordingly, even if one reads the "color calibration profiles" from claim 1 onto the luminance formulas in Tashiro, there is no reason to combine the disclosure in Sindhu with the system in Tashiro, because combining the references in this way would ruin the system in Tashiro and produce a worthless device.

The Office Action states that the reason for combining the system in Tashiro with the system in Sindhu "would have been because Sindhu's approach is reliable over a very wide class of images and is simple enough that most of it can be implemented in hardware." However, even if segmenting image blocks by texture works well for the system in Sindhu, it breaks the system in Tashiro, as explained above. But proposed modifications cannot render prior art unsatisfactory for its intended purpose. MPEP § 2143.01(V). Thus, Tashiro and Sindhu, individually or in combination, do not disclose or suggest the subject matter recited in claim 1.

II. Neither Tashiro nor Sindhu suggests associating a color calibration profile with a spatial characteristic based on a positioning of at least one pixel relative to another pixel

On page 4, the Office Action admits that Tashiro does not disclose that the spatial characteristic is based on a positioning of at least one pixel relative to another pixel. Thus, Tashiro cannot disclose a relationship between a color calibration profile and a spatial characteristic based on a positioning of at least one pixel relative to another pixel.

Furthermore, Sindhu only discloses adaptively compressing images based upon image complexity. Sindhu has nothing to do with color calibration profiles. Thus, Sindhu also

cannot disclose a relationship between a color calibration profile and a spatial characteristic based on a positioning of at least one pixel relative to another pixel.

In addition to the above, there is also the following reason why neither Tashiro nor Sindhu can disclose a relationship between a color calibration profile and a spatial characteristic based on a positioning of at least one pixel relative to another pixel. On p. 4 the Office Action reads the "color characterization profiles" in previously presented claim 1 onto the luminance formulas in Tashiro.² However, during the personal interview, the Examiner admitted that one would not combine the system in Sindhu with the luminance formulas in Tashiro because there would be no reason or rationale to do so. Nevertheless, the Examiner maintained that one would combine the system in Sindhu with other color calibration profiles. However, these other color calibration profiles are simply not disclosed in either Sindhu or Tashiro.

Further, during the personal interview, the Examiner indicated that Tashiro suggested a relationship between a color calibration profile and a spatial characteristic based on a positioning of at least one pixel relative to another pixel. However, this is an overly broad reading of Tashiro. As discussed in section I above, Tashiro only discloses a relationship between luminance levels and a quantity of light and dark pixels. See Figs. 12-14. However, a mere disclosure of a relationship between luminance levels and a quantity of light and dark pixels does not further disclose a relationship between a color calibration profile and a spatial characteristic based on a positioning of at least one pixel relative to another pixel. The disclosure in Tashiro is insufficient because, as explained above, the relative quantities of light and dark pixels do not necessarily have anything to do with spatial characteristics based

² The Office Action on p. 4 states, "selecting one or more color profiles based on the comparison of the spatial characteristics [Fig. 8, ref. S3; Fig. 11; **Figs. 12-14** (conversion tables, or profiles, selected based on comparison result); Col. 11, lines 12-53]" (emphasis added).

upon a positioning of at least one pixel to another pixel. Without a disclosure of such a relationship in either reference, the Office Action's conclusion of obviousness is based upon impermissible hindsight reasoning, because it is based upon knowledge gleaned only from applicants' disclosure. MPEP § 2145(X.A). Thus, Tashiro and Sindhu, individually or in combination, do not disclose or suggest the subject matter recited in claim 1.

III. The other applied references

The Office Action rejects claims 2, 3, 6 and 7 under 35 U.S.C. § 103(a) over Tashiro and Sindhu and further in view of Kasutani (U.S. 7,236,652) and Sampath (U.S. 6,665,425); claims 4 and 5 under 35 U.S.C. § 103(a) over Tashiro, Sindhu, Kasutani, Sampath and further in view of TIFF6 (TIFF Revision 6.0, June 03, 1992, pp. 8, 9, 13-16); claim 10 under 35 U.S.C. § 103(a) over Tashiro and Sindhu and further in view of Chen (U.S. 6,941,121) and Maeda (U.S. 5,682,466); and claim 11 under 35 U.S.C. § 103(a) over Tashiro and Sindhu and further in view of Newman (U.S. 6,603,483) and Milton (U.S. 2003/0117639).

However, all of these rejections are based upon the combination of Tashiro and Sindhu, which is erroneous for the reasons described above. Further, Applicants respectfully submit that none of the other applied references remedy the deficiencies in Tashiro and Sindhu.

IV. New claims

New claims 41-43 depend from claim 1. Thus, new claims 41-43 are allowable based upon their dependency and also based upon the additional subject matter which they recite. Accordingly, Applicants respectfully submit that claims 41-43 are in condition for allowance.

V. Conclusion

In view of the above, Tashiro, Sindhu, and the other applied references, individually or in combination, do not disclose or suggest the subject matter recited in claim 1. Claims 2-11 ultimately depend from claim 1. Thus, Tashiro, Sindhu, and the other applied references, individually or in combination, do not disclose or suggest the subject matter recited in claims 1-11. Withdrawal of the rejections of these claims under 35 U.S.C. § 103(a) is respectfully solicited.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-11 and 41-43 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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